Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A very high repetition rate gas discharge laser system in a MOPA configuration comprising:

a master oscillator gas discharge layer system producing a beam of oscillator laser output light pulses at a very high pulse repetition rate;

at least two power amplification gas discharge laser systems receiving laser output light pulses from the master oscillator gas discharge laser system and each of the at least two power amplification gas discharge laser systems amplifying some of the received laser output light pulses at a pulse repetition that is a fraction of the very high pulse repetition rate equal to one over the number of the at least two power amplification gas discharge laser systems to form an amplified output laser light pulse beam at the very high pulse repetition rate.

2. (original) The apparatus of claim 1 further comprising:

the at least two power amplification gas discharge laser systems comprises two power amplification gas discharge laser systems.

3. (original) The apparatus of claim 1 further comprising:

the at least two power amplification gas discharge lasers systems are positioned in series with respect to the oscillator laser output light pulse beam.

4. (original) The apparatus of claim 2 further comprising:

the at least two power amplification gas discharge lasers systems are positioned in series with respect to the oscillator laser output light pulse beam.

5. (original) The apparatus of claim 3 further comprising:

the master oscillator gas discharge laser system fires at a pulse repetition rate of $x \geq 4000$ Hz;

each power amplification gas discharge laser fires and ½ x.

6. (original) The apparatus of claim 4 further comprising:

the master oscillator gas discharge laser system fires at a pulse repetition rate of $x \geq 4000$ Hz;

each power amplification gas discharge laser fires and ½ x.

7. (original) The apparatus of claim 3 further comprising:

the master oscillator gas discharge laser system fires at a pulse repetition rate of $x \geq 5000$ Hz;

each power amplification gas discharge laser fires and ½ x.

8. (original) The apparatus of claim 4 further comprising:

the master oscillator gas discharge laser system fires at a pulse repetition rate of $x \geq 5000$ Hz;

each power amplification gas discharge laser fires and ½ x.

9. (original) The apparatus of claim 5 further comprising:

a beam delivery unit connected to the laser light output of the power amplification laser system and directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

10. (original) The apparatus of claim 6 further comprising:

a beam delivery unit connected to the laser light output of the power amplification laser system and directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

11. (original) The apparatus of claim 7 further comprising:

a beam delivery unit connected to the laser light output of the power amplification laser system and directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

12. (original) The apparatus of claim 8 further comprising:

a beam delivery unit connected to the laser light output of the power amplification laser system and directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

13. (original) A lithography tool comprising:

a very high repetition rate gas discharge laser system in a MOPA configuration comprising:

a master oscillator gas discharge layer system producing a beam of oscillator laser output light pulses at a very high pulse repetition rate;

at least two power amplification gas discharge laser systems receiving laser output light pulses from the master oscillator gas discharge laser system and each of the at least two power amplification gas discharge laser systems amplifying some of the received laser output light pulses at a pulse repetition that is a fraction of the very high pulse repetition rate, equal to one over the number of the at least two power amplification gas discharge laser systems, to form an amplified output laser light pulse beam at the very high pulse repetition rate.

14. (original) The apparatus of claim 13 further comprising:

the at least two power amplification gas discharge laser systems is two power amplification gas discharge laser systems.

15. (original) The apparatus of claim 13 further comprising:

the at least two power amplification gas discharge lasers systems are positioned in series with respect to the oscillator laser output light pulse beam.

16. (original) The apparatus of claim 14 further comprising:

the at least two power amplification gas discharge lasers systems are positioned in series with respect to the oscillator laser output light pulse beam.

17. (original) The apparatus of claim 15 further comprising:

the master oscillator gas discharge laser system fires at a pulse repetition rate of $x \geq 4000$ Hz;

each power amplification gas discharge laser fires and $\frac{1}{2}$ x.

18. (original) The apparatus of claim 16 further comprising:

the master oscillator gas discharge laser system fires at a pulse repetition rate of $x \geq 4000$ Hz;

each power amplification gas discharge laser fires and ½ x.

19. (original) The apparatus of claim 15 further comprising:

the master oscillator gas discharge laser system fires at a pulse repetition rate of $x \geq 5000$ Hz;

each power amplification gas discharge laser fires and ½ x.

20. (original) The apparatus of claim 16 further comprising:

the master oscillator gas discharge laser system fires at a pulse repetition rate of $x \geq 5000$ Hz;

each power amplification gas discharge laser fires and ½ x.

21. (original) The apparatus of claim 15 further comprising:

a beam delivery unit connected to the laser light output of the power amplification laser system and directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

22. (original) The apparatus of claim16 further comprising:

a beam delivery unit connected to the laser light output of the power amplification laser system and directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

23. (original) The apparatus of claim 17 further comprising:

a beam delivery unit connected to the laser light output of the power amplification laser system and directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

24. (original) The apparatus of claim18 further comprising:

a beam delivery unit connected to the laser light output of the power amplification laser system and directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

25. (previously presented) A laser produced plasma EUV light source comprising:

a very high repetition rate gas discharge laser system in a MOPA configuration comprising:

a master oscillator gas discharge layer system producing a beam of oscillator laser output light pulses at a very high pulse repetition rate;

at least two power amplification gas discharge laser systems receiving laser output light pulses from the master oscillator gas discharge laser system and each of the at least two power amplification gas discharge laser systems amplifying some of the received laser output light pulses at a pulse repetition that is a fraction of the very high pulse repetition rate, equal to one over the number of the at least two power amplification gas discharge laser systems, to form an amplified output laser light pulse beam at the very high pulse repetition rate.

26. (previously presented) The apparatus of claim 25 further comprising:

the at least two power amplification gas discharge laser systems is two power amplification gas discharge laser systems.

27. (previously presented) The apparatus of claim 25 further comprising:

the at least two power amplification gas discharge lasers systems are positioned in series with respect to the oscillator laser output light pulse beam.

28. (previously presented) The apparatus of claim 26 further comprising:

the at least two power amplification gas discharge lasers systems are positioned in series with respect to the oscillator laser output light pulse beam.

29. (previously presented) The apparatus of claim 27 further comprising:

the master oscillator gas discharge laser system fires at a pulse repetition rate of $x \geq 4000$ Hz;

each power amplification gas discharge laser fires and ½ x.

30. (previously presented) The apparatus of claim 28 further comprising:

the master oscillator gas discharge laser system fires at a pulse repetition rate of $x \geq 4000$ Hz;

each power amplification gas discharge laser fires and ½ x.

31. (previously presented) The apparatus of claim 27 further comprising:

the master oscillator gas discharge laser system fires at a pulse repetition rate of $x \geq 5000$ Hz;

each power amplification gas discharge laser fires and ½ x.

32. (previously presented) The apparatus of claim 28 further comprising:

the master oscillator gas discharge laser system fires at a pulse repetition rate of $x \geq 5000$ Hz;

each power amplification gas discharge laser fires and ½ x.

33. (previously presented) The apparatus of claim 29 further comprising:

a beam delivery unit connected to the laser light output of the power amplification laser system and directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

34. (previously presented) The apparatus of claim 30 further comprising:

a beam delivery unit connected to the laser light output of the power amplification laser system and directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

35. (previously presented) The apparatus of claim 31 further comprising:

a beam delivery unit connected to the laser light output of the power amplification laser system and directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

36. (previously presented) The apparatus of claim 32 further comprising:

a beam delivery unit connected to the laser light output of the power amplification laser system and directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

37.-102. (canceled)

103. (previously presented) A method of producing a very high repetition rate gas discharge laser system in a MOPA configuration comprising:

utilizing a master oscillator gas discharge layer system, producing a beam of oscillator laser output light pulses at a very high pulse repetition rate;

utilizing at least two power amplification gas discharge laser systems, receiving laser output light pulses from the master oscillator gas discharge laser system and, in each of the at least two power amplification gas discharge laser systems, amplifying some of the received laser output light pulses at a pulse repetition that is a fraction of the very high pulse repetition rate equal to one over the number of the at least two power amplification gas discharge laser systems to form an amplified output laser light pulse beam at the very high pulse repetition rate.

104. (previously presented) The method of claim 103 further comprising:

the at least two power amplification gas discharge laser systems comprises two power amplification gas discharge laser systems.

105. (previously presented) The method of claim 103 further comprising:

the at least two power amplification gas discharge lasers systems are positioned in series with respect to the oscillator laser output light pulse beam.

106. (previously presented) The method of claim 104 further comprising:

the at least two power amplification gas discharge lasers systems are positioned in series with respect to the oscillator laser output light pulse beam.

107. (previously presented) The method of claim 103 further comprising:

utilizing a beam delivery unit connected to the laser light output of the power amplification laser system, directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

108. (previously presented) The method of claim 104 further comprising:

utilizing a beam delivery unit connected to the laser light output of the power amplification laser system, directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

109. ((previously presented)) The method of claim 105 further comprising:

utilizing a beam delivery unit connected to the laser light output of the power amplification laser system, directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

110. (previously presented) The method of claim 106 further comprising:

utilizing a beam delivery unit connected to the laser light output of the power amplification laser system, directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

111. (currently amended) A method of performing integrated circuit lithography comprising:

utilizing a ~~method~~ mechanism for producing a very high repetition rate gas discharge laser system in a MOPA configuration comprising the steps of:

utilizing a master oscillator gas discharge layer system, producing a beam of oscillator laser output light pulses at a very high pulse repetition rate;

utilizing at least two power amplification gas discharge laser systems, receiving laser output light pulses from the master oscillator gas discharge laser system and, in each of the at least two power amplification gas discharge laser systems, amplifying some of the received laser output light pulses at a pulse repetition that is a fraction of the very high pulse repetition rate equal to one over the number of the at least two power amplification gas discharge laser systems to form an amplified output laser light pulse beam at the very high pulse repetition rate.

112. (previously presented) The method of claim 111 further comprising:

the at least two power amplification gas discharge laser systems comprises two power amplification gas discharge laser systems.

113. (previously presented) The method of claim 111 further comprising:

the at least two power amplification gas discharge lasers systems are positioned in series with respect to the oscillator laser output light pulse beam.

114. (previously presented) The method of claim 112 further comprising:

the at least two power amplification gas discharge lasers systems are positioned in series with respect to the oscillator laser output light pulse beam.

115. (previously presented) The method of claim 111 further comprising:

utilizing a beam delivery unit connected to the laser light output of the power amplification laser system, directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

116. (previously presented) The method of claim 112 further comprising:

utilizing a beam delivery unit connected to the laser light output of the power amplification laser system, directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

117. (previously presented) The method of claim 113 further comprising:

utilizing a beam delivery unit connected to the laser light output of the power amplification laser system, directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

118. (previously presented) The method of claim 114 further comprising:

utilizing a beam delivery unit connected to the laser light output of the power amplification laser system, directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

119. (previously presented) A method of producing EUV light utilizing a laser produced plasma comprising:

utilizing a very high repetition rate gas discharge laser system in a MOPA configuration comprising:

utilizing a master oscillator gas discharge layer system, producing a beam of oscillator laser output light pulses at a very high pulse repetition rate;

utilizing at least two power amplification gas discharge laser systems, receiving laser output light pulses from the master oscillator gas discharge laser system and, in each of the at least two power amplification gas discharge laser systems, amplifying some of the received laser output light pulses at a pulse repetition that is a fraction of the very high pulse repetition rate

equal to one over the number of the at least two power amplification gas discharge laser systems to form an amplified output laser light pulse beam at the very high pulse repetition rate.

120. (previously presented) The method of claim 119 further comprising:

the at least two power amplification gas discharge laser systems comprises two power amplification gas discharge laser systems.

121. (previously presented) The method of claim 120 further comprising:

the at least two power amplification gas discharge lasers systems are positioned in series with respect to the oscillator laser output light pulse beam.

122. (previously presented) The apparatus of claim 121 further comprising:

the at least two power amplification gas discharge lasers systems are positioned in series with respect to the oscillator laser output light pulse beam.

123. (previously presented) The method of claim 119 further comprising:

utilizing a beam delivery unit connected to the laser light output of the power amplification laser system, directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

124. (previously presented) The method of claim 120 further comprising:

utilizing a beam delivery unit connected to the laser light output of the power amplification laser system, directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

125. (previously presented) The method of claim 121 further comprising:

utilizing a beam delivery unit connected to the laser light output of the power amplification laser system, directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

126. (previously presented) The method of claim 122 further comprising:

utilizing a beam delivery unit connected to the laser light output of the power amplification laser system, directing to output of the power amplification laser system to an input of a light utilization tool and providing at least beam pointing and direction control.

127.-138 (canceled)